OPERATOR'S MANUAL

FOR ALL AR-10B AND M15 SERIES RIFLES



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(309) 944-6939

This book provides instructions on the operation and maintenance of rifles from both ArmaLite and the Eagle Arms division of ArmaLite. Read and understand it carefully before you try to use your rifle. Your safety, and that of those around you, depends on your knowledge of your rifle and on your knowledge of safety rules common to all firearms. Please study the common-sense safety rules noted in this manual. Your first responsibility as a gun owner is always safety!

Your second responsibility as a gun owner is security. Make sure that your rifle remains in responsible hands...**YOURS!** Don't become an unwitting partner in a crime or tragedy: make sure your rifle is properly secured. Lock it in a secure storage container or, if none is available, remove the Bolt Carrier Assembly and store it separately. If you don't know where to get a storage container at a reasonable price, contact ArmaLite to obtain one.

ArmaLite manufactures a variety of self loading rifles, and is constantly seeking improvements. All share the same basic design and have the same controls. This manual includes portions of U.S. Army and Marine Corps documents illustrating proven operating and maintenance techniques. The information it contains is appropriate to all ArmaLite and Eagle Arms rifles and carbines.

Instructions which refer to specific models will be clearly marked. The first section of this manual lists safety rules, including how to clear your rifle and render it safe. The next section explains its operation, and the section that follows discusses proper maintenance. The final section covers trouble shooting problems.

NOTICE

ArmaLite has no control over the use of your rifle, and shall not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm, or for its function when used for purposes or subjected to treatment for which it was not intended. ArmaLite will not honor claims under the Limited Warranty which result from careless or improper handling, unauthorized adjustments or parts replacement, corrosion, neglect, use of the wrong type or caliber of ammunition, or the use of ammunition other than original, high quality commercially manufactured ammunition in good condition, or any combination thereof. ArmaLite will not honor claims under the limited warranty for any reason or cause when such claims are made by second or subsequent owners.

Contact ArmaLite directly at (309) 944-6911 with any questions, or to return a rifle for service.

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IMPORTANT NOTE ABOUT YOUR LIMITED WARRANTY

ArmaLite's limited warranty is applicable to original, individual purchasers of ArmaLite only. Institutional purchasers will receive warranty support for a period of one year, regardless of rifle model. THE WARRANTY BECOMES EFFECTIVE ONLY UPON RECEIPT OF THE WARRANTY REGISTRATION CARD PROVIDED WITH THE RIFLE. IF NO CARD IS ON FILE, ALL WORK WILL BE BILLED AT NORMAL SHOP RATES. NO VARIATION IS ALLOWED.

SERVICE, PARTS, AND ACCESSORIES

ArmaLite offers a wide range of service, repair parts, and accessories. This enables you to stock the parts, tools, and instructions needed to maintain your rifle for years. Parts and accessories include:

- All rifle components
- Complete upper halves, to convert your rifle to another configuration, including .243 caliber uppers to convert your .308 to .243 caliber
- Telescopic sights and mounts
- Target shooting sights and supplies
- Cleaning supplies and rifle cases
- Maintenance manuals and tools
- Ammunition
- Extra magazines

The ArmaLite Catalog is available at no charge to purchasers of ArmaLite and Eagle Arms rifles. To obtain yours, simply enclose a note with your warranty registration

USING M-14 20 ROUND RIFLE MAGAZINES

High quality metal 20 round M-14 or M1A magazines can be converted to AR-10B series magazines. U.S. G.I. magazines are best. Neither commercial metal magazines with pressed latch plates nor fiberglass magazines are useable. ArmaLite's new AR-10B magazines are not interchangeable with early AR-10 (waffle) magazines or with SR-25 magazines.

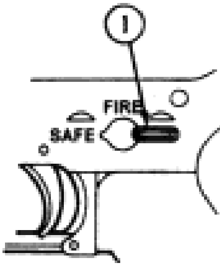
ArmaLite will provide a modified, refinished, and gaged 20 round magazine in exchange for either two 20 round magazines, or for one 20 round magazine and a fee of $25.00, plus shipping. Rusty, dented, pitted, or oversize magazines are not acceptable for this program.A $10.00 charge will be added for unpacking and depreserving magazines with greasy or cosmoline coated interiors or exteriors.

New 10 round magazines are available from ArmaLite for $30.00 each. Converted 20 round magazines are sold for $65 each when available. "Post-Ban" 20 round magazines are available to government and export purchasers. Prices are subject to change.

Any magazine suitable for use in the M16 series service rifle will work in any ArmaLite .223/ 5.56mm rifle.

CLEARING YOUR RIFLE

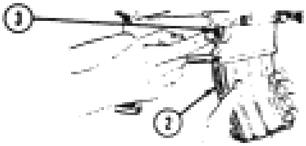
Keep your rifle cleared when not in use.



1. Place safety lever (1) on SAFE

NOTE

If rifle is not cocked, the lever cannot be pointed toward SAFE.



2. Remove the magazine (2) by depressing the magazine catch button (3) and pulling the magazine down.

3. To lock the bolt open, pull the charging handle (4) rearward, press the bottom of the bolt catch (5), and allow the bolt to move forward until the bolt catch stops it. Return the charging handle forward.





4. Check the receiver and chamber (6) to ensure that these areas contain no ammunition.

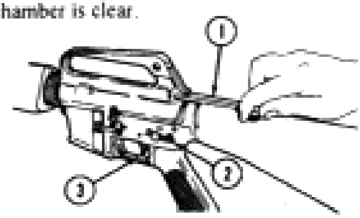
CAUTION!
DO NOT REVERSE THE STEPS IN CLEARING YOUR RIFLE.
IF YOU CLEAR THE CHAMBER BEFORE REMOVING THE MAGAZINE, YOU MAY REMOVE ONE CARTRIDGE THEN IMMEDIATELY CHAMBER ANOTHER!

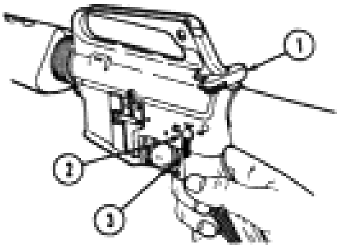
SAFETY CHECK

WARNING

To avoid accidental firing, be sure that the magazine is removed and the chamber is clear.

1. Pull the charging handle (1) to the rear and release it. Place the safety (2) on SAFE. Squeeze the trigger. The trigger should not fall.



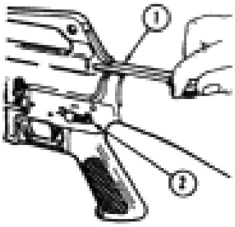


2. Place the safety (2) on FIRE. Squeeze the trigger (3); the hammer should fall. Hold the trigger to the rear. Pull the charging handle (1) to the rear and release it. Release the trigger. You should hear a click as you release the trigger. Squeeze again; the hammer should fall.

Call ArmaLite at (309) 944-6911 if your rifle fails either test.

OPERATING PROCEDURE

LOADING



WARNING
Point muzzle in a safe direction.

1. Pull the charging handle (1) rearward, lock the bolt, and release the charging handle. Place the safety (2) on SAFE. Check to see that the chamber is clear and the bore is not blocked.

LOADING THE MAGAZINE

Set the cartridge on the follower, between the feed lips, and press it straight down.

LOADING THE AR-10 MAGAZINE

The patented spring loaded plunger in the follower engages the bolt catch and holds the bolt open when the last round is ejected. Insert the first round. To load the second round, press the plunger into its hole as you insert the round. Insert the remaining rounds as usual.

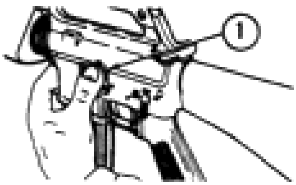
2. Push upward on the magazine (3) until the magazine catch (4) engages and holds the magazine. You can pull downward slightly on the magazine to make sure that it is seated correctly.

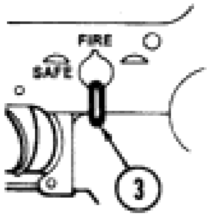


CAUTION: USE ONLY FACTORY-MADE AMMUNITION, IN GOOD CONDITION AND OF THE CORRECT CALIBER FOR YOUR RIFLE.

CHAMBERING AND FIRING A ROUND

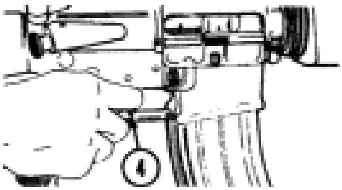
BOLT ASSEMBLY OPEN





1. Depress the upper portion of the bolt catch (1) to release the bolt.

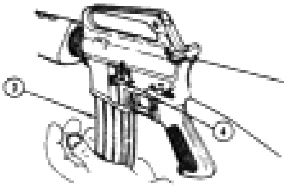
2. With the rifle pointed in a safe direction, move the safety (3) to FIRE.



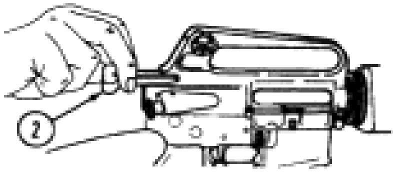
3. Squeeze the trigger (4) and fire.

OPERATING PROCEDURE, CHAMBERING AND FIRING

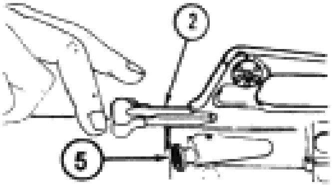
BOLT ASSEMBLY CLOSED



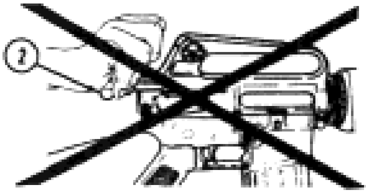
1. Insert magazine (3) until magazine catch (4) engages. Pull down slightly to assure proper seating. NEVER tap or pound the magazine into the receiver.



2. Pull the charging handle all the way back.



3. Release the charging handle. If the bolt carrier doesn't fully close, tap the forward assist (5) to close it (5.56mm/.223 only). If it still won't close, clear the rifle and correct the problem.



4. Never "ride" the charging handle. Let it slide forward on its own.



5. Set safety to FIRE, grip the rifle firmly, and squeeze the trigger. (4)

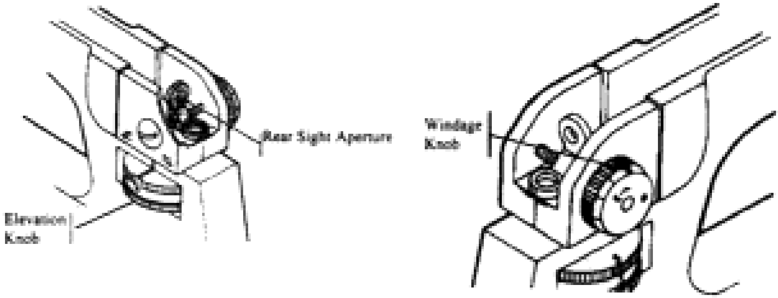
Gripping the rifle with a limp wrist can result in the shooter firing two shots (the second as the rifle recovers from recoil.) This is not a "doubling" malfunction.

Keep the safety on SAFE until you are ready to shoot.
Unload and clear your rifle before leaving the firing position.

CAUTION!
DO NOT REVERSE THE STEPS IN CLEARING YOUR RIFLE. IF YOU CLEAR THE CHAMBER BEFORE REMOVING THE MAGAZINE, YOU MAY REMOVE ONE CARTRIDGE THEN IMMEDIATELY CHAMBER ANOTHER!

OPERATING PROCEDURES

ZEROING THE SIGHTS



Because every shooter is different, two shooters may have a different zero on the same rifle.

1. Rotate the elevation knob in the downward direction (counter clockwise) until either the lowest digit on the scale is aligned with the line above the scale and sight in at the shortest range to be fired (match scale) or set the scale to the distance to be fired, i.e. "2" for 200 yards (standard scale).

2. Carefully aim and fire at the center of the target. Fire at least a three shot group, and locate the center of the group.

3. If your shot group is not in the center of the bull's-eye, use the following chart to shift the group. Turning the windage knob clockwise moves the impact RIGHT. Turning the front sight clockwise (viewed from above) RAISES the impact.

4. Repeat steps 3 and 4 until you are satisfied that you have a good zero.

5. ArmaLite has digits on both the windage and elevation knobs. Record your zero for future reference.

APPROXIMATE IMPACT SHIFT PER CLICK OF ADJUSTMENT

ELEVATION ADJUSTMENT CHART

RANGE IN METERS	**SHIFT PER CLICK** STANDARD SIGHTS	**SHIFT PER CLICK** MATCH SIGHTS
25 Meters	.9 cm, 3/8 in.	.20 cm, 1/12 in.
100 Meters	3.5 cm, 1 3/8 in.	.83 cm, 1/3 in.
200 Meters	7.0 cm, 2 3/4 in.	1.66 cm, 2/3 in

WINDAGE ADJUSTMENT CHART

RANGE IN METERS	**SHIFT PER CLICK** STANDARD SIGHTS	**SHIFT PER CLICK** STANDARD SIGHTS
25 Meters	.3 cm, 1/8 in.	.15 cm, 1/16 in.
100 Meters	1.25 cm, 1/2 in.	.625 cm, 1/4 in.
200 Meters	2.5 cm, 1 in.	1.25 cm, 1/2 in.
300 Meters	3.8 cm, 1 1/2 in.	1.8 cm, 3/4 in.
400 Meters	5.0 cm, 2 in.	2.5 cm, 1 in.
500 Meters	6.3 cm, 2 1/2 in.	3.15 cm, 1 1/4 in.
600 Meters	7.6 cm, 3 in.	3.8 cm, 1 1/2 in.
700 Meters	8.8 cm, 3 1/2 in.	4.4 cm, 1 3/4 in.
800 Meters	10.0 cm, 4 in.	5.0 cm, 2 in.

ArmaLite makes sights in a variety of configurations for different purposes:

Front Sights:

A. Square front sight posts for standard rifles and carbines.

B. Short, square front sight posts for AR-10's.

C. Blade front sight posts for National Match rifles. The wide face of the blade (as viewed from above) must face the shooter. The blade must be adjusted in full 360 degree turns.

Rear Sights:

A. Standard, GI grade. The smaller aperture generally has a curved surface facing the shooter.

B. Match sights generally have the apertures reversed at the factory so a flat surface is always presented to the eye.

C. Elevation indexes are either marked 0 to 20 to reflect clicks (match type) or with digits reflecting range (standard type).

OPERATING PROCEDURES

THE NATIONAL MATCH TRIGGER

The ArmaLite National Match trigger mechanism is a precision device intended to aid accuracy by reducing the distracting effect of the long, heavy, irregular trigger pull of the standard trigger mechanism commonly found on M16 family rifles.

The National Match trigger is a two stage trigger with distinct characteristics: a first stage which is relatively light, and a second stage of heavier resistance. Microscopic variations in the surface of the parts may cause slight graininess in the first stage. This is normal on production parts, and will not effect the release of the shot. A properly adjusted second stage will not be creepy, and is the key to a successful mechanism.

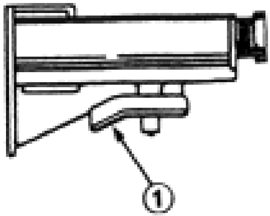
The ArmaLite two stage match trigger is based on that of M1/M14 rifle, and is not user adjustable. It is intentionally built with a barely detectable creep in the second stage. As the trigger breaks in with use (200 to 500 rounds) the creep tends to disappear. It is not possible to exactly predict the amount of break-in of a new trigger, so it is impossible to produce a fixed device which will always break in to produce a perfect trigger pull.

If creep remains, the trigger may be adjusted by a trained gunsmith using the same techniques used with the M1/M14 trigger system. ArmaLite technicians will adjust the triggers for a fee of $25 plus shipping. Instructions will be provided to licensed gunsmiths upon request.

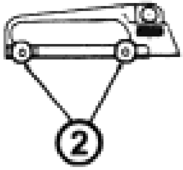
ArmaLite absolutely cannot condone modification of the ArmaLite trigger mechanism by anyone other than a trained, licensed gunsmith. Any such modification may render the device unsafe and will void the 1 year factory warranty.

COLLAPSIBLE BUTTSTOCK

To extend the collapsible buttstock, depress lever (1) and pull the stock out until it locks into position. To collapse the buttstock, depress the lever again and push forward until it locks into position.



REMOVABLE CARRYING HANDLE



To install the removable carrying handle, removable front sight, or scope mount, loosen the knobs (2) to give maximum clearance to the bar. Slip the carrying handle over the base, and tighten down until firm. Reverse this procedure to remove.

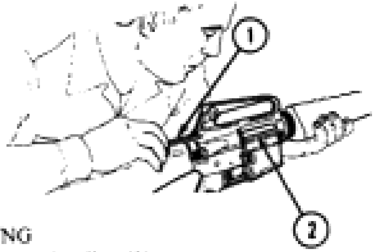
CENTERING THE REAR SIGHT

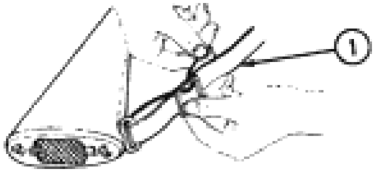
The removable carrying handle is designed as a backup sight. Manufacturing tolerances may result in the rear sight being well off center when zeroed.

MAINTENANCE PROCEDURES, FIELD STRIPPING

CLEARING THE RIFLE

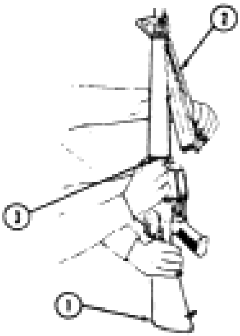
IMPORTANT: Remove the magazine. Pull back the charging handle (1) and check the chamber. Be sure that the safety is on SAFE.





SLING
Remove the sling (1).

2 PIECE HAND GUARDS - THE 'BUDDY SYSTEM"



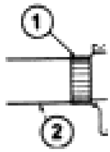
1. Stand the rifle on its buttstock (1) with one hand gripping the stock and the other gripping the lower end of the hand guard (2).

2. While your buddy presses down on the slip ring (3), which is a two hand job, pull the hand guard free.

3. Repeat this procedure to remove the other hand guard.

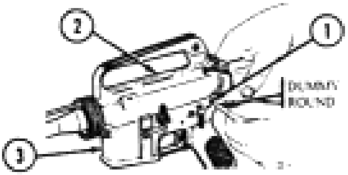
TUBULAR HAND GUARDS

The tubular handguards should rarely be removed

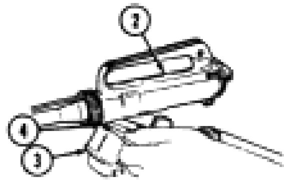


1. With a strap wrench, loosen the handguard lock ring (1) by turning counterclockwise (viewed from the butt).
2. Unscrew the lock ring and slide the handguard (2) over the Picatinny gas housing and off the rifle.

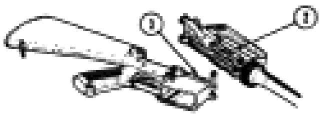
UPPER AND LOWER RECEIVERS



1. Push takedown pin (1) as far as it will go. Excess force can severely damage the receiver. Take it easy!

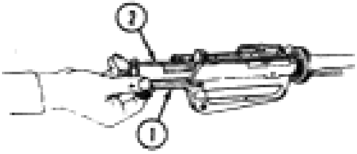


2. Pivot the upper receiver (2) from the lower receiver (3).
3. Push the receiver pivot pin (4) as far as it will go. Take it easy!

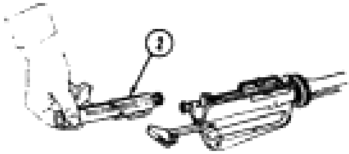


4. Separate the upper and lower receivers.

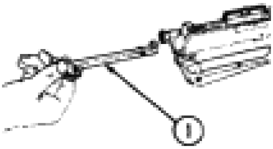
MAINTENANCE PROCEDURES, FIELD STRIPPING
CHARGING HANDLE AND BOLT CARRIER ASSEMBLY



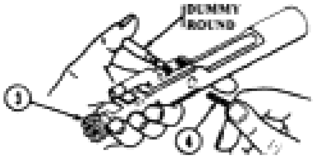
1. Pull back the charging handle (1) and bolt carrier assembly (2)



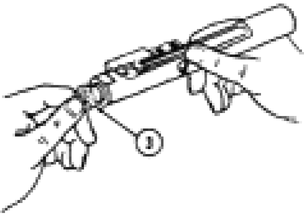
2. Remove the bolt carrier assembly (2)



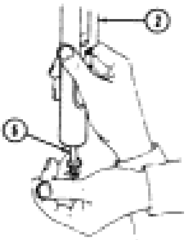
3. Pull the charging handle (1) back and down to remove it.



4. Move the bolt assembly (3) forward to the unlocked position and remove the firing pin retaining pin (4). Do not open or close the split end of the firing pin retaining pin.

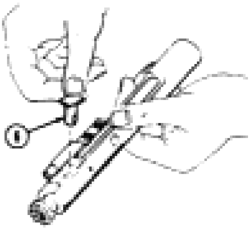


5. Push in on the bolt assembly (3) to put it in the locked position.



6. Catch the firing pin (5) as it drops out of the rear of the bolt carrier assembly (2).

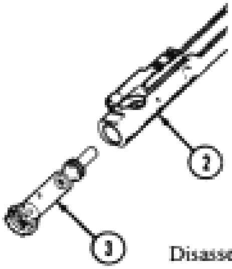
DO NOT REMOVE THE AR-10 FIRING PIN SPRING



7. Give the bolt cam pin (6) a 1/4 turn and lift it out.

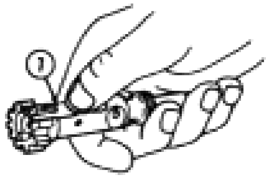
MAINTENANCE PROCEDURES, FIELD STRIPPING

CHARGING HANDLE AND BOLT CARRIER (CONTINUED)

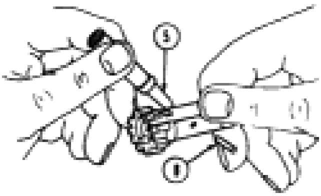


8. Remove the bolt assembly (3) from the bolt carrier assembly (2).

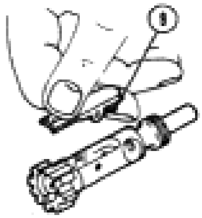
NOTE
Disassemble the extractor and spring assembly only when it is dirty or damaged.



9. Press the top rear of the extractor (7) to check that the spring works.

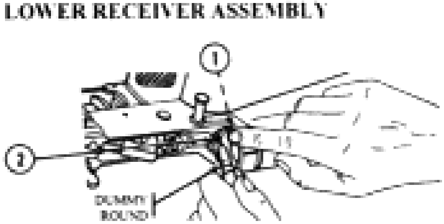


10. Use a dummy round (5) to remove the extractor pin (8).

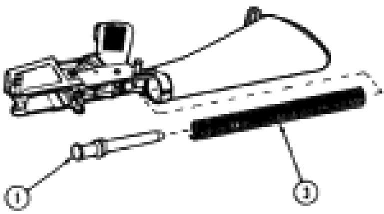


11. Remove the extractor and spring assembly (9). Do not remove the spring assembly or its insert (if any) from the extractor.

LOWER RECEIVER ASSEMBLY



1. Cock the hammer with your thumb. Push in the buffer (1) and depress the retainer (2) to release the buffer.



2. Remove the buffer (1) and the buffer spring (3).

NO FURTHER DISASSEMBLY IS REQUIRED.

MAINTENANCE PROCEDURES, CLEANING

CLEANING SOLVENTS AND LUBRICANTS

The Military Services generally use a multipurpose chemical called CLP (cleaner, lubricant, and preservative) sold commercially as "BreakFree." Although it is useful if nothing else is available, armament engineers prefer individual, specialized products. A combination of military RBC (rifle bore cleaner) and LSA (lubricant, semifluid, automatic weapons) is superior. A high quality cleaning solvent like Hoppes no. 9 removes metal fouling from the bore excellently, and Teflon bearing lubricants, such as Bore Cote, are outstanding lubricants.

Under **NO** conditions should any lubricant containing graphite be used with your rifle. Graphite can encourage rapid corrosion to the aircraft-grade aluminum used in your rifle.

In addition to cleaning solvents and lubricants, the basic cleaning equipment you will need includes a cleaning rod, brass bore brush, chamber brush, toothbrush, patches, pipe cleaners, and lint-free cloth.

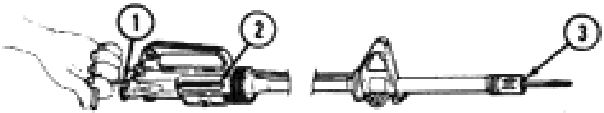
UPPER RECEIVER AND BARREL ASSEMBLY

NOTE

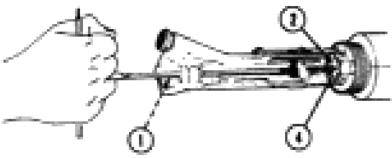
Don't reverse the direction of the bore brush while it's in the bore.



Use cleaning solvent on the bore and chamber, the gas tube, the upper receiver and barrel assembly, locking lugs and all areas of powder fouling, corrosion, dirt or dust.



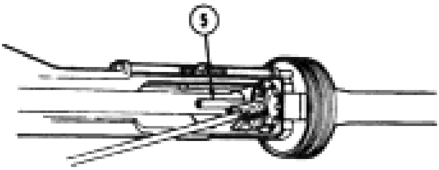
1. Use a cleaning rod, bore brush and cleaning solvent. Run the rod (1) through the chamber (2) and flash suppressor several times. The recoil check (3) is not removable. It has been pinned and welded in place to meet federal regulations.



2. Install the chamber brush on the cleaning rod (1), dip it in cleaning solvent, and insert it into the chamber (2) and locking lugs (4). Clean by pushing and twisting the cleaning rod.

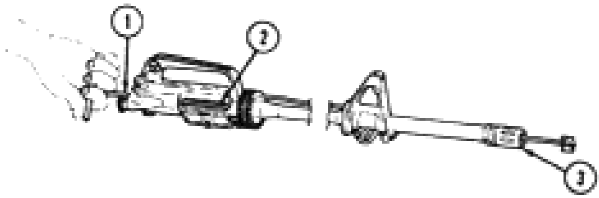
MAINTENANCE PROCEDURES, CLEANING AND INSPECTION

UPPER RECEIVER AND BARREL ASSEMBLY (CONTINUED)

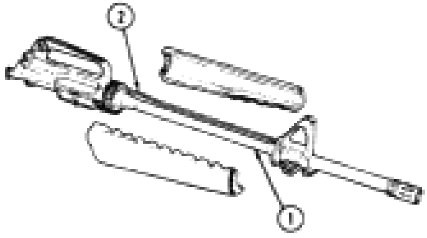


3. Use a worn out bore brush to clean the outside surface of the protruding gas tube (5) (get the sides and bottom from the bottom of the upper receiver). This procedure ruins the brush.

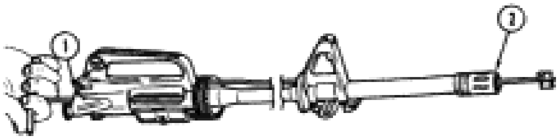
NOTE
Gas tubes will discolor from heat. Do not try to remove this discoloration



4. Take the bore brush off the rod (1) and install a swab holder and a swab. Apply cleaning solvent to the swab, then run it through the chamber (2) and out the flash suppressor (3). To remove carbon build up, let the solvent sit, then wipe clean. A bore brush may be used with care to remove heavy carbon buildup. Wipe the bore dry by running clean swabs all the way through from the chamber to the flash suppressor. **REMEMBER,** do not change directions in the bore.



Inspect the barrel (1), gas tube (2), and hand guards for cracks, bends, or breaks. Be sure the barrel has no obstructions.

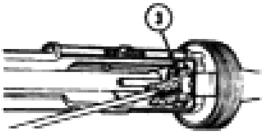


1. Lightly lubricate the bore and chamber, outer surface of the barrel and front sight, and the surfaces under the handguards.

2. With a lubricated swab, run the rod from the receiver to the flash suppressor. Do not over lubricate.

MAINTENANCE PROCEDURES, CLEANING AND INSPECTION

UPPER RECEIVER AND BARREL ASSEMBLY (CONTINUED)

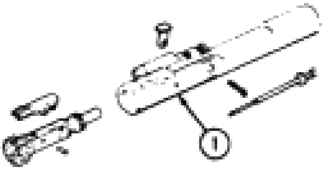


3. Lubricate the locking lugs.

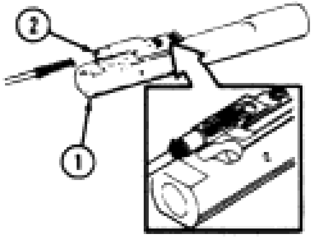


4. Drip lubricant on the front sight detent, then depress the detent to work the lubricant in.

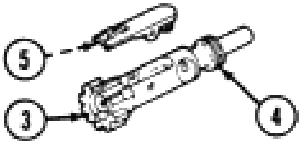
CHARGING HANDLE AND BOLT CARRIER ASSEMBLY



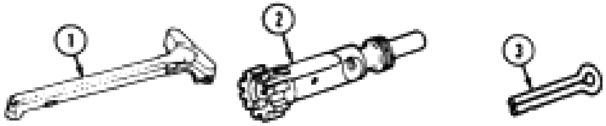
1. Clean all parts and outer surfaces of the bolt carrier assembly with a swab saturated with cleaning solvent.



2. Clean the bolt carrier key (2) with a worn bore brush dipped in solvent and dry with a pipe cleaner.



3. Remove carbon deposits and dirt from the locking lugs (3) with a bore brush dipped in solvent.
4. Clean the areas behind the bolt rings (4) and under the lip if the extractor (5).



1. Inspect the charging handle (1) for cracks, bends or breaks.
2. Inspect the bolt assembly (2) for cracks or fractures, especially in the cam pin hole area. DO NOT interchange bolts between rifles.
3. Inspect the firing pin retaining pin (3) for bends, breaks, or dents.

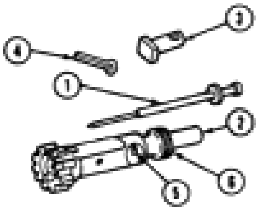


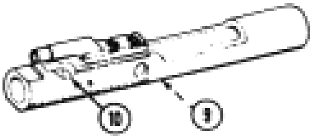
4. Inspect the firing pin (5) for bends, cracks, or a blunted tip.
5. Inspect the bolt cam pin (4) for cracks or chips.
AR-10 only: Assure that the firing pin spring (not shown) is installed with its tight end in the firing pin's groove.

MAINTENANCE PROCEDURES, CLEANING AND INSPECTION

CHARGING HANDLE AND BOLT CARRIER (CONTINUED)

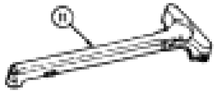
1. Lightly lubricate the firing pin (1) and firing pin recess (2) in the bolt assembly.
2. Generously lubricate the outside of the bolt cam pin (3) and the firing pin retaining pin (4). Make certain to lubricate the bolt cam pin hole (5), bolt rings (6), and the outside of the bolt.

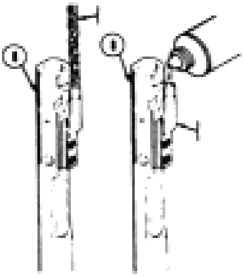




4. Lightly lubricate the inner and outer surfaces of the bolt carrier (8). Generously lubricate the slide (9) and the cam pin area (10) of the bolt carrier.

5. Lightly lubricate the charging handle (11).

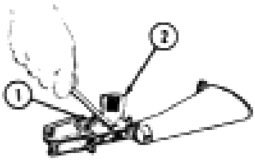




3. Dry the key of the bolt carrier assembly (8) with a pipe cleaner. Place one drop of lubricant inside the key.

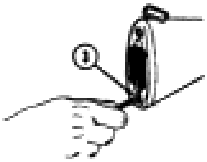
LOWER RECEIVER ASSEMBLY

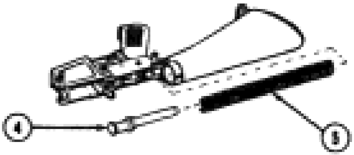
CAUTION
Do not use a wire brush or any type of abrasive material to clean aluminum surfaces



1. Wipe dirt from the trigger with a swab.
2. Use a swab and cleaning brush to clean powder fowling, corrosion, and dirt from the lower receiver. (2).

3. Use a pipe cleaner to clean the buttstock screw hole

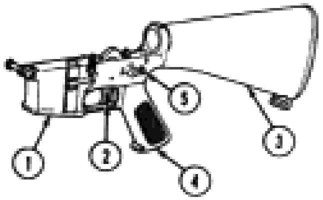




4. Clean the buffer (4), recoil spring (5), and inside lower receiver with a swab dipped in solvent.

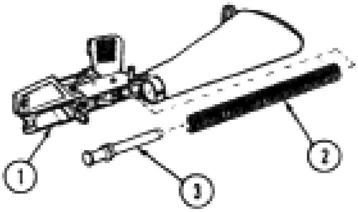
MAINTENANCE PROCEDURES, CLEANING AND INSPECTION

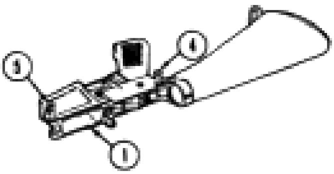
LOWER RECEIVER ASSEMBLY (CONTINUED)



Examine the lower receiver assembly for a broken or bent trigger (2) buttstock (3), corroded or deformed lower receiver (1), cracked or damaged grip (4), and bent or damaged safety (5). Look at the inside parts for cracks, dents, or breaks.

1. Lightly lubricate the recoil spring (2) and buffer (3).



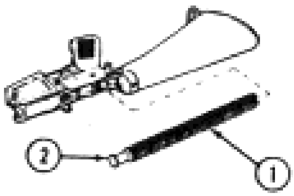


2. Generously lubricate the takedown (4) and pivot pins (5) and the inside parts of the lower receiver assembly.

REASSEMBLY

LOWER RECEIVER ASSEMBLY

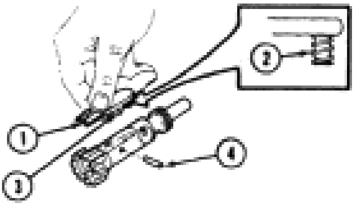
Insert buffer spring (1) and buffer (2).



CHARGING HANDLE AND BOLT CARRIER

NOTE

The extractor has a silicone insert (2) in the spring. Don't lose it.



1. If the spring comes loose, seat the large end of the spring in the extractor.

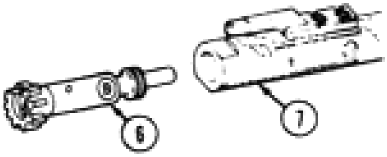
2. Insert the extractor (1) with spring assembly into bolt.

3. Push extractor until the holes on the extractor (3) and bolt are aligned and insert the extractor pin (4).

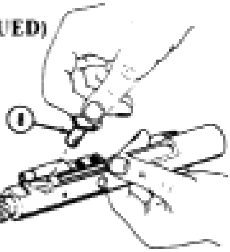


4. If three piece gas ring system is used, stagger the gaps in the gas rings (5) to prevent gas loss.

CHARGING HANDLE AND BOLT CARRIER (CONTINUED)



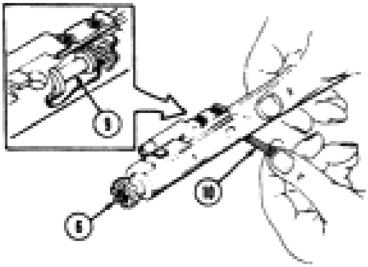
5. Slide the bolt assembly (6) into the bolt carrier (7).



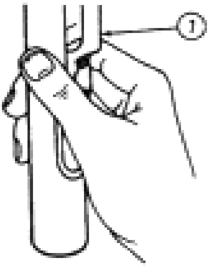
6. Insert the bolt cam pin (8) and give it a 1/4 turn.



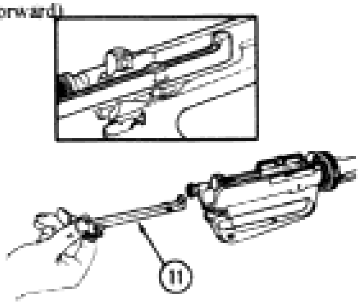
7. Drop the firing pin (9) into its opening. (AR10: verify that the tight end of the firing pin spring engages the groove on the firing pin.)



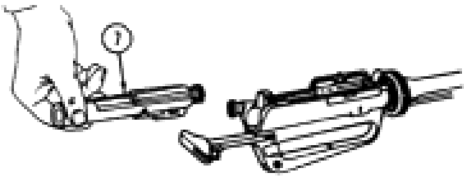
8. Pull the bolt assembly forward and replace the firing pin retaining pin (10) in the area behind the large flange of the firing pin (9). (he AR-10 firing pin must be pressed forward).



9. Turn bolt carrier assembly over and try to shake out the firing pin. The firing pin should not fall out.

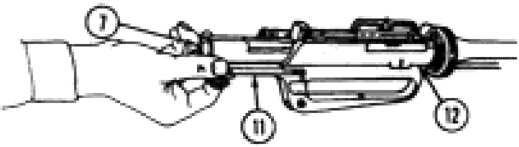


10. Engage, then push the charging handle (11) part way into the upper receiver.



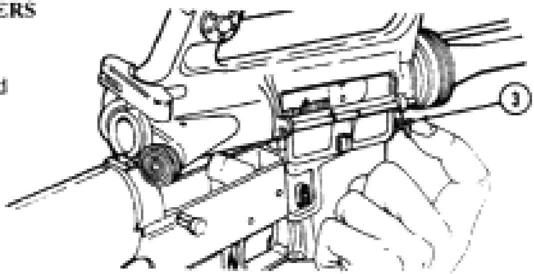
11. Slide the bolt carrier assembly (7), bolt extended, into the upper receiver.

CHARGING HANDLE AND BOLT CARRIER (CONTINUED)



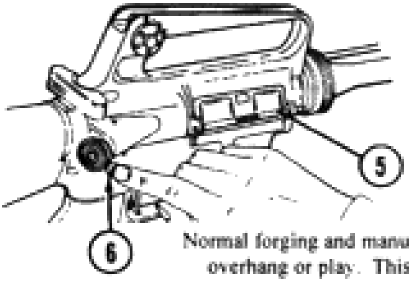
12. Push the charging handle assembly (11) and bolt carrier assembly (7) together into the upper receiver (12).

UPPER AND LOWER RECEIVERS



NOTE
The hammer must be in cocked position to join receivers.

1. Join the upper and lower receivers.
2. Align the pivot pin holes and push in pivot pin (3).

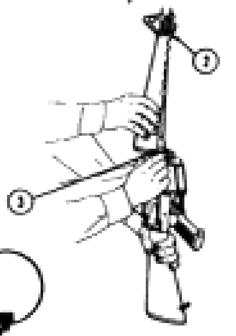


CAUTION
The ejection port cover (5) must be closed before the receivers are joined to prevent damage to the cover.

4. Close the upper and lower receivers. Push in the takedown pin (6).

NOTE
Normal forging and manufacturing variations may result in slight overhang or play. This will not affect function or accuracy.

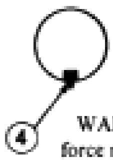
HANDGUARDS AND SLING - THE BUDDY SYSTEM



1. Place the weapon on its buttstock with one hand gripping the stock. Insert one handguard into the hand guard cap (2).
2. Have your buddy press down on the slip ring (3).
3. Install handguard.
4. Repeat these steps to install the second handguard.

TUBULAR HANDGUARDS

1. Slide the tubular handguard over the muzzle and picatinny gas housing.
2. Line up the handguard with the lock ring so that the slung stud (4) is in the desired position.
3. Rotate the lock ring clockwise to tighten down.



WARNING: Excessive force may loosen barrel nut or deform the gas tube



5. Attach sling (1).

TROUBLE SHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
WON'T FIRE	Selector lever on SAFE.	Put it on FIRE.
	Improper assembly of firing pin.	Assemble correctly. NOTE: the retaining pin goes in back of large shoulder of firing pin.
	Too much oil in firing pin recess.	Wipe out with pipe cleaner.
	Defective ammunition.	Remove and discard.
	Too much carbon on firing pin or firing pin recess.	Clean.
BOLT WON'T UNLOCK.	Dirty bolt.	Clean.
	Burred or broken bolt.	Contact ArmaLite.
WON'T EXTRACT.	Broken extractor spring.	Replace.
	Silicone insert missing from extractor spring.	Replace.
	Dirty, corroded, or reloaded ammunition.	Remove and discard.
	Carbon in chamber.	Clean chamber.
	Frozen extractor.	Remove and clean.
	Restricted buffer assembly.	Remove and clean.
	Restricted movement of bolt carrier assembly.	Remove, clean, and lubricate.
	Clogged gas tube.	Replace.
	Short recoil.	See below.
WON'T FEED.	Dirty, corroded, or reloaded ammunition.	Remove and discard.
	Dirty or defective magazine.	Clean or replace.
	Too many rounds in magazine.	Remove excess rounds.
	Buffer assembly is restricted.	Take out and clean buffer and spring.
	Magazine not fully seated.	Adjust magazine catch: Press button on right side, and turn catch on left. Clockwise tightens.
	Short recoil.	See below.

TROUBLESHOOTING (CONTINUED)

PROBLEM	CHECK FOR	WHAT TO DO
DOUBLE FEED	Defective magazine.	Replace.
WON'T CHAMBER	Dirty corroded or defective ammunition.	Remove and discard.
	Carbon in carrier key or chamber.	Clean.
WON'T LOCK	Dirt, corrosion, or carbon buildup in barrel locking lugs.	Clean lugs.
SHORT RECOIL.	Gaps in bolt rings not staggered.	Stagger ring gaps (if three piece system is being used).
	Rings worn or too loose.	Replace with McFarland 1 piece gas ring.
	Carbon or dirt in carrier key or on outside of gas tube.	Clean.
	Q-Tip/pipe cleaner stuck inside carrier key.	Remove.
	Weak or reloaded ammunition.	Replace with factory fresh ammunition. Remington UMC is recommended.
BOLT FAILS TO LOCK OPEN AFTER LAST ROUND.	Defective magazine.	Replace.
	Dirty or corroded bolt catch.	Clean or replace.
	Weak or reloaded ammunition.	Replace with factory fresh ammunition. Remington UMC is recommended.
SELECTOR LEVER BINDS.	Needs oil.	Lubricate.
	Dirt or sand under trigger.	Clean.
BOLT CARRIER "HUNG UP."	Round jammed between bolt and charging handle and/or double feed.	1 Remove magazine. 2 Push in on bottom of bolt catch. 3 Bang rifle butt on ground, bolt should lock to rear. 4 While bolt is held to rear, round should fall out through magazine well. NOTE: If this procedure fails, use a cleaning rod to push bolt fully to the rear through the ejection port.

KEEP CLEAR OF THE MUZZLE!

SAFETY RULES
BE A SAFE SHOOTER

ACCIDENT (Ak'si dent) N
1. An unintentional or unexpected happening that is undesirable or unfortunate, esp. one resulting in injury, damage, harm, or loss.

BE A RESPONSIBLE GUN OWNER!

** Always keep the muzzle pointed in a safe direction.

* Never point a gun at anything that you do not intend to shoot.

* Keep your finger(s) off the trigger and out of the trigger guard until you are aiming at your target and ready to shoot.

* Always keep safety on, especially when the gun is loaded and cocked, until you are ready to fire

* Be sure of your target and backstop before you shoot. Ask yourself what your bullet will hit if it misses or goes through the target.

* Be sure that your barrel is clear of obstructions, including excessive oil and grease, before shooting.

* Always keep and carry your gun with an empty chamber until you intend to shoot, so that your gun cannot be fired unintentionally.

* Firearms should be unloaded when not actually in use.

* Treat every gun as if it is loaded....AT ALL TIMES.

* Store guns and ammunition separately beyond children's reach.

* Wear hearing protection when shooting.

* Never shoot at hard, flat surfaces or water....bullets will ricochet.

* Do not alter or modify your gun.

* Do not try to change your rifle's trigger pull, because alterations of trigger pull usually affect sear engagement and might cause accidental firing.

* Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead, a substance known to be associated with birth defects, reproductive harm, and other serious injury. Have adequate ventilation at all times and wash hands after handling.

SAFETY IS *YOUR* RESPONSIBILITY!

NEVER HANDLE YOUR RIFLE IF YOU HAVE BEEN DRINKING ALCOHOLIC BEVERAGES; ALCOHOL AND GUN POWDER DON'T MIX!

NEVER POINT YOUR RIFLE AT ANYTHING YOU DON'T INTEND TO SHOOT

ALWAYS HANDLE YOUR RIFLE AS IF IT WERE LOADED

MAKE SURE THAT THE BORE IS CLEAR BEFORE LOADING

USE ONLY FACTORY-MADE AMMUNITION OF THE RIGHT CALIBER

NEVER LOAD YOUR RIFLE UNTIL YOU ARE GOING TO SHOOT

KEEP THE SAFETY ON UNLESS YOU ARE SHOOTING

WEAR EAR AND EYE PROTECTION WHEN SHOOTING

CLEAR YOUR RIFLE WHEN YOU FINISH SHOOTING, BEFORE CLEANING, AND EVERY TIME YOU HAND IT TO ANOTHER PERSON

IN CASE OF MALFUNCTION *STOP*. REVIEW THIS MANUAL TO FIND AND CLEAR THE PROBLEM.
IF YOU CANNOT RESOLVE IT, CONTACT ARMALITE

KEEP THIS MANUAL WITH YOUR RIFLE.
IF YOU SELL THE RIFLE, GIVE THIS MANUAL TO THE NEW OWNER